

ExxonMobil Chemical Company
Mont Belvieu Plastics Plant
13330 Hatcherville Road
Mont Belvieu, Texas 77580-9532



February 20, 2019

**ExxonMobil Mont Belvieu Plastics Plant
ExxonMobil Chemical Company Flare Consent Decree
Semi-Annual Report (SAR)**

Director, Air Enforcement Division
Office of Civil Enforcement
U.S. Environmental Protection Agency
Mail Code 2242-A
1200 Pennsylvania Ave., N.W.
William Jefferson Clinton Building
Room 1119
Washington, D.C. 20460-0001
Certified Mail Number: 7018 2290 0000 1322 1198

Associate Director
Air, Toxics, and Inspections Coordination Branch (6 EN-A)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, Texas 75202
Certified Mail Number: 7018 2290 0000 1322 1181

Attention: Consent Decree, Civil Action No. 4:17-cv-3302

Pursuant to Section X, Paragraphs 66-73 of Consent Decree, Civil Action No. 4:17-cv-3302, Exxon Mobil Corporation (ExxonMobil) submits this Semi-Annual Report covering the period of June 6, 2018 through December 31, 2018.

Certification Statement
Per Consent Decree Paragraph 71:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge

and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions about this SAR or require any additional information, please contact Sasha Easley at 832-625-2508.

Sincerely,



Wim Blokker
Mont Belvieu Site Manager
ExxonMobil Mont Belvieu Plastics Plant

cc: EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-5-2-1-10128 and 10128/1
Certified Mail Number: 7018 2290 0000 1322 1150

United States Attorney
Southern District of Texas
Andrew A. Bobb
Assistant U.S. Attorney
1000 Louisiana St., Suite 2300
Houston, TX 77002
Certified Mail Number: 7018 2290 0000 1322 1167

parrish.robert@epa.gov
foley.patrick@epa.gov
osbourne.margaret@epa.gov
eescdcopy.enrd@usdoj.gov (Re: DJ # 90-5-2-1-10128 and 10128/1)



Mont Belvieu Plastics Plant

Mont Belvieu, Texas

**SEMI-ANNUAL REPORT
PURSUANT TO CONSENT DECREE,
*UNITED STATES, ET AL V. EXXON MOBIL CORPORATION
AND EXXONMOBIL OIL CORPORATION,*
CIVIL ACTION NO. 4:17-cv-3302 (S.D. TX)**

June 6, 2018 – December 31, 2018

**13330 Hatcherville Road
Mont Belvieu, Texas**

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SECTION 1 STATUS OF CONSENT DECREE SECTION V COMPLIANCE REQUIREMENTS

This progress report provides the status of implementation of Consent Decree requirements that, during the reporting period, require the ExxonMobil Mont Belvieu Plastics Plant to undertake a specific action or make a submittal to an agency; or otherwise require the ExxonMobil Mont Belvieu Plastics Plant to take specific steps to implement new obligations, including new control or emissions requirements, new monitoring requirements, or institution of new procedures. Once the ExxonMobil Mont Belvieu Plastics Plant has reported a requirement as implemented, it will not appear in subsequent progress reports under this subparagraph.

Consent Decree Paragraph 66a. – b.

a. A description of the status of work performed and progress made toward implementing all requirements of Consent Decree Section V (Compliance Requirements) at the Covered Facilities. This topic should describe any major milestones completed and remaining to be completed;

ExxonMobil Mont Belvieu Plastics Plant has completed the following work to meet the requirements of Consent Decree Section V Compliance Requirements. Major milestones completed for this reporting period are in Table 1.1.

TABLE 1.1 Major Milestones Completed For This Reporting Period

Covered Flare	Description of Work Completed During This Reporting Period
None	None

ExxonMobil Mont Belvieu Plastics Plant is in the process of completing the following work to meet the requirements of Consent Decree Section V Compliance Requirements.

TABLE 1.2 Status of Remaining Work to be Completed

Applicability	Remaining Work To Be Completed	Anticipated Completion Date
LDPE and HDPE	Submit Flare Data and Monitoring Systems and Protocol Report	No later than 6/6/2019

LDPE and HDPE	Submit Initial Waste Gas Minimization Plan	No later than 6/6/2019
LDPE and HDPE	Conduct internal reporting and recordkeeping for Reportable Flaring Incidents	No later than 6/6/2019

b. A description of any problems encountered or anticipated in meeting the requirements in Consent Decree Section V (Compliance Requirements) at the Covered Facilities, together with implemented or proposed solutions;

ExxonMobil Mont Belvieu Plastics Plant has not encountered and does not anticipate problems in meeting the requirements of Consent Decree Section V Compliance Requirements as shown in Table 1.3.

TABLE 1.3 Encountered or Anticipated Problems In Work To be Completed

Covered Flare	Encountered or Anticipated Problem(s)	Proposed or Implemented Solution(s)
None	None	None

SECTION 2 STATUS OF CONSENT DECREE SECTION V REPORTING REQUIREMENTS

Below is a summary of the status of reports as required under Consent Decree Section V.

Flare Data and Monitoring Systems and Protocol Report

Requirement: CD Paragraph 18

Description: For each Covered Flare, by no later than 365 Days after the Effective Date, the Defendants must submit a report, consistent with the requirements in Appendix 1.5, to EPA that includes the following:

- a. The information, diagrams, and drawings specified in Paragraphs 1–7 of Appendix 1.5;
- b. A detailed description of each instrument and piece of monitoring equipment, including the specific model and manufacturer, that the Defendants have installed or will install in compliance with Paragraphs 20–24 of this Consent Decree (Paragraphs 8–9 of Appendix 1.5); and
- c. A narrative description of the monitoring methods and calculations that the Defendants will use to comply with the requirements of Paragraph 43 (Paragraph 10 of Appendix 1.5).

Status: This section does not apply to this semi-annual reporting period. The Flare Data and Monitoring Systems and Protocol Report is due no later than June 6, 2019.

Initial Waste Gas Minimization Plan (“Initial WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 365 Days after the Effective Date, for each Covered Flare, the Defendants must submit to EPA an Initial Waste Gas Minimization Plan that discusses and evaluates flaring Prevention Measures on both a facility-wide and Covered Flare-specific basis for each Covered Facility.

Status: This section does not apply to this semi-annual reporting period. The Initial Waste Gas Minimization Plan is due no later than June 6, 2019.

First Updated Waste Gas Minimization Plan (“First Updated WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 730 Days after the Effective Date, the Defendants must submit to EPA a First Updated WGMP that updates, if and as necessary, the information, diagrams, and drawings required in the Flare Data and Monitoring Systems and Protocol Report required by Paragraph 18 and the information required in sub-Paragraphs 29.a–29.e for the 12-month period after the period covered by the Initial Waste Gas Minimization Plan.

Status: This section does not apply to this semi-annual reporting period. The first Updated Waste Gas Minimization Plan is due no later than June 5, 2020.

SECTION 3 STATUS OF PERMITTING ACTIVITY

Consent Decree Paragraph 66c.

c. A description of the status of any permit applications, including a summary of all permitting activity, pertaining to compliance with this Consent Decree;

Status: ExxonMobil Mont Belvieu Plastics Plant is preparing to submit a request to incorporate the requirements listed in the Consent Decree Paragraph 60.c into Permit 19016 such that the requirements (i) become and remain “applicable requirements” as that term is defined in 40 C.F.R §70.2 and (ii) survive the termination of the Consent Decree. In accordance with Consent Decree Paragraph 60.b., the request will be submitted no later than one year after the Effective Date or one year after the respective deadline for the Compliance Requirements listed in Paragraph 60.c.

The ExxonMobil Mont Belvieu Plastics Plant is preparing to submit a request to make the requirements listed in the Consent Decree Paragraph 60.c federal enforceable in Title V O-02276. In accordance with Consent Decree Paragraph 60.b., the request will be submitted no later than three years after the Effective Date or one year after the respective deadline for the Compliance Requirements listed in Paragraph 60.c.

SECTION 4 REPORTS SUBMITTED TO LDEQ

Consent Decree Paragraph 66d.

- d. A copy of any reports that were submitted only to LDEQ and that pertain to compliance with this Consent Decree.

Status: Does not apply because ExxonMobil Mont Belvieu Plastics Plant is located in the State of Texas and thus does not submit reports to LDEQ.

SECTION 5 STATUS OF SEP(S)

Consent Decree Paragraph 66e.

e. A description of the Defendants' progress in satisfying its obligations in connection with the SEP(s) under Section VI including, at a minimum, a narrative description of activities undertaken; status of any construction or compliance measures, including the completion of any milestones set forth in the SEP Work Plan (attached as Appendix 2.1), and a summary of costs incurred since the previous report;

Refer to Semi-Annual Report submitted by the ExxonMobil Baytown Chemical Plant for status of Federal Supplemental Environmental Project (SEP).

Refer to Semi-Annual Report submitted by the ExxonMobil Baton Rouge Chemical Plant for status of Louisiana Beneficial Environmental Projects (BEPs).

SECTION 6 UPDATED WASTE GAS MINIMIZATION PLAN (WGMP)

Consent Decree Paragraph 66f

f. Any updated WGMP for the Covered Facilities that is required to be submitted by Paragraph 31.

Subsequent Updates to WGMPs ("Subsequently Updated WGMP")

Requirement: CD Paragraph 31

On an annual basis after submitting the First Updated WGMP until termination of the Decree, the Defendants must submit an updated WGMP for a Covered Facility as part of the Semi-Annual Report required by Section IX (Reporting Requirements) if, at that Covered Facility, the Defendants: a) commence operation of a Newly Installed Covered Flare or permanently remove a Covered Flare from service, b) connect a new Waste Gas stream to a Covered Flare, c) intentionally modify the Baseload Waste Gas Flow Rate to a Covered Flare, d) install additional FGRS, or e) change the design of a Covered Flare. Each update must update, if and as necessary, the information required in sub-Paragraphs 29.a.i - 29.a.iii. Each update must update, if and as necessary, the information required in sub-Paragraphs 30.a and 30.b. To the extent the Defendants propose to extend any schedule set forth in a previous WGMP for any of the Covered Facilities, the Defendants may do so only with good cause, the determination of which is subject to Section XII (Dispute Resolution).

This section does not apply to this semi-annual reporting period. The Initial Waste Gas Minimization Plan is due no later than June 6, 2019 and the first Updated Waste Gas Minimization Plan is due no later than June 5, 2020.

SECTION 7 SUMMARY OF INTERNAL FLARING INCIDENT REPORTS

Consent Decree Paragraph 66g.

- g. Any summary of internal flaring incident reports as required by Paragraph 34.

Status: This section does not apply to this reporting period. In accordance with Paragraph 34.a. of the Consent Decree, ExxonMobil Mont Belvieu Plastics Plant will begin internal Reportable Flaring Incident (RFI) reporting and recordkeeping no later than June 6, 2019.

SECTION 8 REPORTING SUMMARY

Consent Decree Paragraph 66h.

- h. A summary of the following, per Covered Flare per Calendar Quarter (hours shall be rounded to the nearest tenth):
- (1) The total number of hours of Instrument Downtime claimed pursuant to Paragraph 45, expressed as both an absolute number and a percentage of time the Covered Flare that the instrument/equipment monitors is In Operation and Capable of Receiving Sweep, Supplemental, and/or Waste Gas;

TABLE 8.1 June 6 – June 30, 2018 Instrument Downtime Summary

Covered Flare	Monitoring System	System Downtime (%)	System Downtime (hours)
HDPE	Vent Gas Flow	0.0	0.0
HDPE	Ring Steam Flow	0.2	1.5
HDPE	Center Steam Flow	0.0	0.0
HDPE	Net Heating Value	0.0	0.0
HDPE	Camera	0.5	2.9
LDPE	Vent Gas Flow	0.0	0.0
LDPE	Steam Flow	0.0	0.0
LDPE	Net Heating Value	0.0	0.0
LDPE	Camera	0.0	0.0

TABLE 8.2 3rd Quarter 2018 Instrument Downtime Summary

Covered Flare	Monitoring System	System Downtime (%)	System Downtime (hours)
HDPE	Vent Gas Flow	0.4	8.0
HDPE	Ring Steam Flow	0.2	4.5
HDPE	Center Steam Flow	0.1	3.0
HDPE	Net Heating Value	0.0	0.0

HDPE	Camera	0.5	11.0
LDPE	Vent Gas Flow	0.4	8.2
LDPE	Steam Flow	0.2	5.0
LDPE	Net Heating Value	0.6	12.2
LDPE	Camera	0.1	1.0

TABLE 8.3 4th Quarter 2018 Instrument Downtime Summary

Covered Flare	Monitoring System	System Downtime (%)	System Downtime (hours)
HDPE	Vent Gas Flow	0.0	0.0
HDPE	Ring Steam Flow	0.0	0.0
HDPE	Center Steam Flow	0.1	0.5
HDPE	Net Heating Value	0.3	6.5
HDPE	Camera	0.3	6.5
LDPE	Vent Gas Flow	2.2	47.7
LDPE	Steam Flow	0.1	1.7
LDPE	Net Heating Value	0.7	14.2
LDPE	Camera	0.0	0.0

- (2) If the total number of hours of Instrument Downtime claimed pursuant to Paragraph 45 exceeds 5% of the time in a Calendar Quarter the Covered Flare affected by the downtime is In Operation, an identification of the periods of downtime by date, time, cause (including Malfunction or maintenance), and, if the cause is asserted to be a Malfunction, the corrective action taken;

Status: No Covered Flare incurred Instrument Downtime claimed pursuant to Paragraph 45 that exceeded 5% of the time the flare was In Operation in any Calendar Quarter, as noted by “None” in Tables 8.4 – 8.6.

TABLE 8.4 June 6 – June 30, 2018 Instrument Downtime Identification (if total hours exceeds 5%)

Covered Flare	Monitoring System	Start Date/Time	End Date/Time	Cause	Corrective Action
None	None	None	None	None	None

TABLE 8.5 3rd Quarter 2018 Instrument Downtime Identification (if total hours exceeds 5%)

Covered Flare	Monitoring System	Start Date/Time	End Date/Time	Cause	Corrective Action
None	None	None	None	None	None

TABLE 8.6 4th Quarter 2018 Instrument Downtime Identification (if total hours exceeds 5%)

Covered Flare	Monitoring System	Start Date/Time	End Date/Time	Cause	Corrective Action
None	None	None	None	None	None

- (3) The total number of hours, expressed as both an absolute number of hours and a percentage of time that the Covered Flare was In Operation, in which the requirements of Paragraphs 43-44 were not applicable because the only gas or gases being vented were Pilot Gas or Purge Gas;

TABLE 8.7 June 6 – June 30, 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow

Covered Flare	Time (%)	Time (Hours)
HDPE	None	None
LDPE	None	None

TABLE 8.8 3rd Quarter 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow

Covered Flare	Time (%)	Time (Hours)
HDPE	None	None
LDPE	None	None

TABLE 8.9 4th Quarter 2018 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow

Covered Flare	Time (%)	Time (Hours)
HDPE	None	None
LDPE	None	None

(4) Exceedances of Combustion Efficiency Standards.

- i. The total number of hours, expressed as both an absolute number of hours and a percentage of time the Covered Flare was In Operation, of exceedances of the emissions standards in Paragraphs 43-44; provided however, that if the exceedance of these standards was less than 5% of the time in a Calendar Quarter and was due to one or more of the exceptions set forth in Paragraph 45, the report shall so note; and

Status: No exceedance of combustion efficiency standards was due to one or more of the exceptions set forth in Paragraph 45, as noted by "None" in Tables 8.10 – 8.12.

TABLE 8.10 June 6 – June 30, 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45

Covered Flare	Time (%)	Time (Hours)
None	None	None

TABLE 8.11 3rd Quarter 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45

Covered Flare	Time (%)	Time (Hours)
None	None	None

TABLE 8.12 4th Quarter 2018 Exceedance of Standard less than 5% of the Time in this Period and Was Due to Exceptions Set Forth in Paragraph 45

Covered Flare	Time (%)	Time (Hours)
None	None	None

ii. If the exceedance of the emissions standards in Paragraphs 43-44 was not due to one of the exceptions in Paragraph 45 (Instrument Downtime), or if the exceedance was due to one or more of the exceptions in Paragraph 45 and the total number of hours caused by the exceptions exceeds 5% of the time in a Calendar Quarter that the Covered Flare affected by the Instrument Downtime was In Operation, an identification of each block period that exceeded the standard, by time and date; the cause of the exceedance (including startup, shutdown, maintenance, or Malfunction), and if the cause is asserted to be a Malfunction, an explanation and any corrective actions taken; and

Status: There were no exceedances of combustion efficiency standards as noted by “None” in Tables 8.13 - 8.15.

TABLE 8.13 June 6 – June 30, 2018 Exceedance of Combustion Efficiency Standards

Covered Flare	Combustion Efficiency Standard	Start Date/Time	End Date/Time	Cause	Corrective Action
None	None	None	None	None	None

TABLE 8.14 3rd Quarter 2018 Exceedance of Combustion Efficiency Standards

Covered Flare	Combustion Efficiency Standard	Start Date/Time	End Date/Time	Cause	Corrective Action
None	None	None	None	None	None

TABLE 8.15 4th Quarter 2018 Exceedance of Combustion Efficiency Standards

Covered Flare	Combustion Efficiency Standard	Start Date/ Time	End Date/ Time	Cause	Corrective Action
None	None	None	None	None	None

- (5) Compliance with Compressor Availability Requirements. Sufficient information to document compliance with the FGRS Compressor availability requirements of sub-Paragraph 38.b. For any period of non-compliance, the Defendants must identify the date, cause, and corrective action taken.

This section does not apply to the ExxonMobil Mont Belvieu Plastics Plant.

SECTION 9 ADDITIONAL MATTERS

Consent Decree Paragraph 66i.

i. Any additional matters that the Defendants believe should be brought to the attention of EPA, or LDEQ for the Baton Rouge Facilities.

Status: None.

SECTION 10 FENCELINE AIR MONITORING REPORTS

Consent Decree Paragraph 67 a. – b.

The Defendants must submit Fenceline Air Monitoring Reports as part of each Semi-Annual Report. The Fenceline Air Monitoring Reports must contain the following information:

- a. In spreadsheet format, the individual sample results for each monitor comprising each Fenceline Monitoring System, each bi-weekly annual average benzene concentration difference value (once annual averages are available), and the corresponding meteorological data for the relevant monitoring periods. The first two columns of each spreadsheet shall be the date and time for each sample taken; and
- b. A detailed description of the actions and findings of any root cause analysis and corrective action(s) undertaken pursuant to Paragraph 3(g) of Appendix 2.2, including the known results of the corrective action(s) and the anticipated emissions reductions (in TPY per pollutant).

This section does not apply to the ExxonMobil Mont Belvieu Plastics Plant.

SECTION 11 ANNUAL EMISSION DATA

Consent Decree Paragraph 68

In the Semi Annual Report that is submitted on February 28 of each year, the Defendants must provide, for each Covered Flare, for the prior calendar year, the amount of emissions of the following compounds (in tons per year): VOCs, HAPs, NO_x, CO₂, methane, and ethane.

As of the date of this Semi-Annual Report, the annual emissions are reflected in Table 11.1 below.

TABLE 11.1 2018 Annual Emissions Data

Covered Flare	Emissions, tons per year					
	VOCs	HAPs	NO _x	CO ₂	Methane	Ethane
HDPE	29	7	9	17,569	40	6
LDPE	41	1	13	27,251	18	2

SECTION 12 ANY ADDITIONAL NON-COMPLIANCE

Consent Decree Paragraph 69

Each Semi-Annual Report must also include a description of any non-compliance with the requirements of this Consent Decree not otherwise identified by Paragraph 66 along with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the Defendants must so state in the report. In such a case, the Defendants must investigate the cause of the violation and then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day the Defendants become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the Defendants of their obligation to provide the notice required by Section XI (Force Majeure).

TABLE 12.1 Additional Non-Compliance

Covered Flare	Requirement Paragraph	Start Date/ Time	End Date/ Time	Cause	Corrective Action
None	None	None	None	None	None